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JUL 26 2002

TECH CENTER 1600/2900

Underlined = deleted in targeting construct

**Bold** = sequence flanking Neo insert in targeting construct

**AATATTTCTTGACCTAATGCCATCTTGTGTCCCCTTGCAGAGCCCTATTCTAACATG**  
**GCTGATGACTATGGCTCTGAATCCACATCTTCCATGGAAGACTACGTTAACTTCAACTTC**  
**ACTGACTTCTACTGTGAGAAAAACAATGTCAGGCAGTTGCGAGCCATTCCCTCCCACCC**  
**TTGTACTGGCTCGTGTTCATCGTGGGTGCCTTGGGAAACAGTCTTGTAT CCTTGTCTAC**  
**TGGTACTGCACAAGAGTGAAGACCATGACCGACATGTTCCCTTGAATTGGCAATTGCT**  
**GACCTCCCTTTCTTGTCACTCTCCCTCTGGGCCATTGCTGCTGCTGACCAGTGGAAAG**  
**TTCCAGACCTTCATGTGCAAGGGTCAACAGCA TGTACAAGATGAACTTCTACAGCTGT**  
**GTGTTGCTGATCATGTGCATCAGCGTGGACAGGTACATTGCCATTGCCAGGCCATGAGA**  
**GCACATACGGAGGGAGAAAAGGCTTTGTACAGCAAATGGTTGCTTACCATCTGG**  
**GTATTGGCAGCTGCTCTGCATCCCAGAAATCTTACAGCCAAATCAAGGAGGAATCC**  
**GGCATTGCTATCTGCACCATGGTTACCCCTAGCGATGAGAGCACCACAAACTGAAGTCAGCT**  
**GTCTTGACCCCTGAAGGTCAATTCTGGGGTCTTCCCTTCGTGGTCATGGCTTGCTGC**  
**TATACCATCATCATTACACCCCTGATACAAGCCAAGAAGTCTTCCAAGCACAAGCCCTA**  
**AAAGTGACCATCACTGTCCTGACCGTCTTGTCTCAGTTCCCTACAACTGCATT**  
**T TGTGGTGCAGACCATGACGCCATTGCCATGTTACCTCCAACGTGCCGTTCCACC**  
**AACATTGACATCTGCTTCCAGGTCAACCCAGACCATGCCCTTCCACAGTTGCCCTGAAC**  
**CCTGTTCTCTATGTTTGTGGGTGAGAGATTCCGCCGGATCTCGTAAAACCCCTGAAG**  
**AACTTGGTTGCATCAGCCAGGCCAGTGGTTTCATTACAAGGAGAGAGGGAAAGCTTG**  
**AAGCTGTCGTCTATGTTGCTGGAGACAAACCTCAGGAGCACTCTCCCTCTGAGGGGTCTC**  
**TCTGAGGTGCATGGTTCTTGAAGAAATGAGAAATACATGAAACAGTTCCCCACTGA**  
**TGGGACAGAGAGAGTGAAGAGAGAAAAGAAAACAGAAAGGGATGAACTGAACTATAT**  
**GATTACTGTAGTCAGAATTGCCAAAGCAAATATTCAAATCAACTGACTAGTGCAGG**  
**AGGCTGTTGATTGGCTCTGACTGTGATGCCACTGCCGGAGCATCAATGCCGTCGCCTGGAG**  
**GCACGTGGAGCACCCCTGGCTTGCACTGTGAACCTCTGTGGCTCAGTTCTCATGCTGCCT**  
**GAGCCCTGGATTCTCCATGCACTGTGAACCTCTGTGGCTCAGTTCTCATGCTGCCT**  
**CTTCCAAAAGGGACACAGAAAGCACTGGCTGCTACAGACCGCAAAGCAGAAAGTT**  
**CGTAAAATGTCATCTTGGAAATTCTACCCCTGCTCTGAGCCTGATAACCCATGC**  
**CAGGTCTTATAGATTCTGATCTAGAACCTTCCAGGCAATCTCAGACCTAATTCTTC**  
**TGTTCTCCTGTTCTGGTACAGTGTCTCTCCATGCCCTGAGCAGGGAGATTATAACAGCTGG**  
**CAGGTCTGCCAGTGAACCCCTGGACAACGTGACCAACACCAAGGCATCCAAAGTCTGT**  
**TGGCTCCAATCCATTCTGTGCTGCTGGAGGTTAACCTAGACAAGGATTCCGCTT**  
**ATTCCCTGGTATGGTACAGTGTCTCTCCATGCCCTGAGCAGGGAGATTATAACAGCTGG**  
**GTTCGAGGAGGCCAGCCTGGCCCTGTTGAGGCTTGTGAGTGGCACTTGCTTT**  
**GGGTCCACCGCTGCTGCTCCCTAGAAAATGGGCTGGTTCTTGGCCCTCTCTTCT**  
**GAGGCCACTTATTCTGAGGAATACAGTGAAGCAGATATGGCAGCAGCCAGGTAGGGCA**  
**AAGGGGTGAAGGCAGGCCTTGGAAGGCTATTACTCCATGCTCTCTTTCTTA**  
**CTCTATAGTGGCAACATTAAAGCTTTAACCTAGAGATTAGGCTGAAAAAAATAAGT**  
**AATGGAATTCACCTTGACATCTTGTGCTTCTTATCATGATTGGCAAAATGCATCA**  
**CCTTGAAAATATTACATATTGGAAAAGTGTCTTAAATGTGTATATGAAGCATTAAAT**  
**TACTTGTCACTTCTTACCCCTGTCATATTAAAGTGTGCAATTAAAGATCAAAT**  
**AGATACATTAAGAGTGTGAAGGCTGGTCTGAAGGTAGTGAGCTATCTCAATGGATTGT**  
**CACACTCAGTTACAGATTGAACCTCTGTTCTACTCCCTGCTCTACTGCAATTG**  
**ACTAGTCTTAAAAAAAGTGTGAAGAGTAAGCAATAGGGATAAGGAAATAAGATCT**

(SEQ ID NO: 1)

FIGURE 2A



Underlined = deleted in targeting construct

**Bold** = sequence flanking Neo insert in targeting construct

**AATATTTCTTGACCTAATGCCATCTGTGTCCCCTGCAGAGCCCTATTCTAACATG**  
**GCTGATGACTATGGCTCTGAATCCACATCTCCATGGAAGACTACGTTAACTTCAACTTC**  
**ACTGACTTCTACTGTGAGAAAAACAATGTCAGGCAGTTGCGAGCCATTCCCTCCCACCC**  
**TTGTACTGGCTCGTGTTCATCGTGGGTGCCTTGGGCAACAGTCTTGTAT CCTTGTCTAC**  
**TGGTACTGCACAAGAGTGAAGACCATGACCGACATGTTCCCTTGAATTGGCAATTGCT**  
**GACCTCCTCTTCTGTCACTCTCCCTCTGGGCCATTGCTGCTGCTGACCGAGTGGAAAG**  
**TTCCAGACCTTCATGTGCAAGGGTCAACAGCA **TGTACAAGATGAACTTCTACAGCTGT****  
**GTGTTGCTGATCATGTGCATCAGCGTGGACAGGTACATTGCCATTGCCAGGCCATGAGA**  
**GCACATACTGGAGGGAGAAAAGGCTTTGTACAGCAAATGGTTGCTTACCATCTGG**  
**GTATTGGCAGCTGCTCTGCATCCCAGAAATCTTATACAGCCAAATCAAGGAGGAATCC**  
**GGCATTGCTATCTGCACCATGGTTACCCCTAGCGATGAGAGCACCAGTGAAGTCAGCT**  
**GTCTTGACCTGAAAGGTCAATTCTGGGGTCTTCCCTTCGTGGTCATGGCTTGCTGC**  
**TATACCATCATCATTACACACCCGTACAGCAAGGAAAGTCTTCCAAGCACAAGCCCTA**  
**AAAGTGACCATCACTGTCTGACCGTCTTGTCTCAGTTCCCTACAACTGCATT**  
**T TGTGGTGCAGACCATGACGCCTATGCCATGTTCATCTCCAACTGTGCCGTTCCACC**  
**AACATTGACATCTGCTCCAGGTCAACCGACCATGCCCTTCCACAGTTGCCCTGAAC**  
**CCTGTTCTCTATGTTTGTGGGTGAGAGATTCCGCCGGATCTGTGAAAACCCCTGAAG**  
**AACTTGGGTTGCATCAGCCAGGCCAGTGGTTCAATTACAAGGAGAGGAGGGAAAGCTTG**  
**AAGCTGCGTCTATGTTGCTGGAGACAACCTCAGGAGCACTCTCCCTCTGAGGGGTCTTC**  
**TCTGAGGTGCATGGTTCTTGGAAAGAAATGAGAAATACATGAAACAGTTCCCCACTGA**  
**TGGGACCAAGAGAGGTGAAAGAGAAAAGAAAAGTCAAGAAAGGATGAATCTGAACATAT**  
**GATTACTTGTAGTCAGAATTGCCAAAGCAAATATTCAAATCAACTGACTAGTGCAGG**  
**AGGCTGTTGATTGGCTCTGACTGTGATGCCGCAATTCTCAAAGGAGGACTAAGGACCG**  
**GAACGTGGAGCACCCCTGGCTTGCCACTCGCCGGAGCATCAATGCCGCTGCCTCTGGAG**  
**GAGCCCTGGATTTCATGCAGTGAACCTCTGTGGCTCAGTTCTCATGCTGCCT**  
**CTTCCAAAAGGGGACACAGAACGACTGGCTGCTACAGACCGCAAAGCAGAAAGTT**  
**CGTAAAATGTCATCTTGGAAATTCTACCCCTGCTCTGAGCCTGATAACCCATGC**  
**CAGGTCTTATAGATTCTGATCTAGAACCTTCCAGGCAATCTCAGACCTAATTCCCTTC**  
**TGTTCTCTTGTCTGTTCTGGCCAGTGAAGGTCTGTTGATTTGAAACGATCTG**  
**CAGGTCTTGCCTGGACACTGACCCACTGACCAACACCAAGGCATCCAAAGTCTGT**  
**TGGCTTCAATCCATTCTGTGCTGGAGGTTAACCTAGACAAGGATCCGCTT**  
**ATTCCCTGGTATGGTACAGTGTCTCTCCATGCCCTGAGCAGGGAGATTATAACAGCTGG**  
**GTTCGCAGGAGCCAGCCTGGCCCTGTTGAGGCTTGTAGGCTTGTGAGTGGCAGTTGCTTT**  
**GGGTCCACCGTCTGCTGCTCCCTAGAAAATGGCTGGTTCTTGGCCCTCTCTTCT**  
**GAGGCCACTTATTCTGAGGAATACAGTGAGCAGATATGGGCAGCAGCCAGGTAGGGCA**  
**AAGGGGTGAAGCGCAGGCCTGCTGGAAGGCTATTACTCCATGCTCTCCTTTCTTA**  
**CTCTATAGGCAACATTAAAGCTTTAACCTAGAGATTAGGCTGAAAAAAATAAGT**  
**AATGGAATTCACCTTGATCTTGTCTTCTTATCATGATTGGCAAATGCATCA**  
**CCTTGAAAATATTACATATTGAAAAGTGTCTTAAATGTGTATATGAAGCATTAAAT**  
**TACTTGTCACTTCTTACCCCTGTCATATTAAAGTGTGTGCAATTAAAGATCAAAT**  
**AGATACATTAAGAGTGTGAAGGCTGGCTGAAGGTAGTGAGCTATCTCAATCGGATTGTT**  
**CACACTCAGTTACAGATTGAACCTCTGTTCTACTCCCTGCTCTACTGCAATTG**  
**ACTAGTCTTAAAAAAAGTGTGAAGAGTAAGCAATAGGGATAAGGAAATAAGATCT**  
**(SEQ ID NO:1)**

FIGURE 2A